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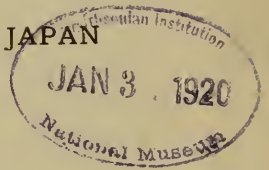
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DESCRIPTION OF A NEW FOSSIL FISH FROM JAPAN

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Iquius nipponicus Jordan, new genus and species

Type (No. 441, Museum California Academy of Sciences) is a well preserved imprint of the anterior three-fifths of a small fish from the island of Iki, off the north coast of Kiusiu, Japan. The portion preserved is four inches long, the whole fish probably about seven.

Head 1.3 times in depth at front of dorsal; eye 2.5 in head; gape of mouth 4 in head; length of mandible 5; height of dorsal 1.6 in head; length of pectoral 1.43; length of ventral 1.5.

Dorsal rays I, 8; pectoral 16; ventral 14. Vertebrae to front of dorsal 12; to first interspinal 10; abdominal vertebrae about 23 (some lost); total probably not far from 36.

General form like that of a herring; the occipital region rather depressed, the nape rising moderately behind it; snout apparently short, a little more than half eye, probably rather acute; mouth small, oblique, the lower jaw shorter and rather thin, but with a broad base at insertion; both jaws apparently with small bluntish teeth, one near tip of lower jaw larger.

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(These statements as to the mouth may be fallacious as the bones may be distorted.) Eyes very large, separated by the sphenoid bone which lies at the base of the skull. Opercular bones entire; preopercle narrow, opercle broad. Head apparently scaleless, but there are marks on the snout as of small scales. (These are probably fallacious.)

Vertebrae small, the anterior not modified, all about as deep as long, hour-glass shaped anteriorly, less so behind, neural spines straight, rather weak, directed backward; dorsal interspinals rather strong, the anterior ones especially; ribs moderate, curved, not directed strongly backward.

Dorsal short and rather high with one appressed spine or simple ray, about half the height of the first soft ray, the rays rapidly shortened backward, the last ray not one-third the height of the first; pectoral inserted low, the lower rays shorter and much weaker than the upper; ventrals about under third ray of dorsal, the rays rather strong; 14 rays are present which number may include both fins, but in appearance there is one fin only.

Scales small, thin, rounded, cycloid, looking like herring scales. These are evident along the line of the back and elsewhere. No dorsal scutes, the scales being all of the usual type; no trace of ventral scutes, but the ventral outline is not well shown.

This specimen is apparently the first fossil fish yet recorded from Japan. It is embedded in firm grayish chalky rock, resembling the Miocene deposits about Los Angeles, much firmer and heavier than the Celite of Lompoc. The horizon of the deposits on the island of Iki are probably of Tertiary age if I may judge from this specimen alone. The genus *Iquius* is characterized by the short dorsal with a simple appressed ray in front as in most Cyprinidae, by the small mouth with included lower jaw, and by the evident teeth, one of them apparently enlarged. The dorsal fin is more like that of Cyprinoid fish, but the general structure suggests that of a herring and the vertebrae are isospondylous and I place the genus provisionally among the Clupeidae. In its mouth parts it bears some resemblance to the living genus *Clupeichthys*.